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REMARKS

Applicant acknowledges, with appreciation, the allowance of claims 1-6, and the indication that claims 11-19, 21-26 and 29-43 contain allowable subject matter. Claims 1-43 are currently pending, with claims 1, 7 and 20 being the independent claims. Claims 1-43 have been amended. No new matter has been added. Reconsideration of the application, as amended, is respectfully requested.

Claims 11 and 12 were objected to based on certain informalities. In response to this objection, Applicant has amended the claims in a manner that is believed to address each specific objection. Withdrawal of the objections is requested.

In the Office Action dated November 15, 2005, independent claims 7 and 20, and dependent claims 8-10 were rejected under 35 U.S.C §103(a) as unpatentable over 3rd Generation Partnership Project; Technical Specification Group Services and Systems Aspects QoS Concept (3G TR 23.907 version 1.1.0) ("TR 23.907"), while dependent claims 27 and 28 were rejected under 35 U.S.C. §103(a) as unpatentable over TR 23.907 in view of Applicant's background of the present invention ("ABPT"). For the following reasons, it is respectfully submitted that all claims of the present application are patentable over the cited reference.

Independent claim 7 has been amended to recite the steps of "detecting at least a delivery order attribute (DOA) as a parameter set for a transmission protocol type used for transmission of data packets" and "deciding whether said delivery order attribute parameter is set for said protocol type...". Support for these amendments may be found, for example, in Fig. 3A, step S31 and S32 and at pg. 15, lines 15-26 of the originally filed specification. No new matter has been added.

The Office Action (pg. 3) states:

[TR 23.907]

Detecting at least a delivery order attribute (Delivery order) as a parameter for transmission of data packets (a Delivery order which is part of the UMTS bearer service attributes is derived from the user protocol, PDP type, and detected, e.g. by the UMTS BS manager in the MT, CN EDGE, and the Gateway, page 13, lines 9-17 of section 6.2.2.1, and page 17, lines 21 of section 6.4.2.1 - page 18, lines 1-4).

Deciding whether said delivery order attribute parameter is set (3GPP also teaches that the Delivery order is set to "y" for out-of-sequence is not acceptable or "n" for out-of-sequence is acceptable, page 17, lines 21 of section 6.4.2.1-page 18, lines 1-4, therefore, the step of deciding whether the Delivery order is et to

“y” or “n” must be included after the Delivery order is derived from the PDP type).

TR 23.907 fails to teach or suggest the method recited in amended independent claim 7, as well as the network element of correspondingly amended claim 20 in which the method of claim 7 is implemented. The delivery order attribute is described in the background of Applicant's originally filed specification, for example, at pg. 4, lines 15-27. As stated therein, the delivery order attribute, i.e., a PDP context QoS parameter, is defined and included in a set of UMTS bearer QoS parameters. In addition, the specification states, the delivery order attribute parameter (DOA) defines whether the order of transmitted packages must be maintained for the UMTS.

TR 23.907 (pg. 13, paragraph 6.2.2.1) teaches that the UMTS BS manager in the MT, CN EDGE and the Gateway signal between each other and via the translation function with external instances to establish or modify a UMTS bearer service. TR 23.907 (pg. 13, paragraph 6.2.2.1) further teaches that each of the UMTS BS managers interrogates its associated admission/capability control to determine whether the network entity supports the specific requested service and whether the required resources are available. Furthermore, TR 23.907 (pg. 13, paragraph 6.2.2.1) teaches that the CN EDGE UMTS BS manager verifies with the subscription control the administrative rights for using the service. However, TR 23.907 fails to teach or suggest “detecting at least a delivery order attribute (DOA) as a parameter set for a transmission protocol type used for transmission of data packets” as recited in amended independent claim 7, or as defined in correspondingly amended independent claim 20.

TR 23.907 (pg. 17, paragraph 6.4.2.1) teaches that the delivery order attribute indicates whether or not a UMTS bearer shall provide in-sequence SDU delivery. TR 23.907 (pg. 17) states, “the [delivery order attribute] is derived from the user protocol [PDP type] and specifies [whether] out-of-sequence SDUs are acceptable”. TR 23.907 (pg. 17, paragraph 6.4.2.1) does not teach “deciding whether said delivery order attribute parameter is set for said protocol type,” as recited in amended independent claim 7, or as defined in correspondingly amended independent claim 20.

TR 23.907 (pg. 18, lines 3-4) also states, “the attribute is derived from the user protocol [PDP type] and specifies if out of sequence SDU's are acceptable or not” and that “This information cannot be extracted from the traffic class”. TR 23.907 fails to teach or suggest

that the delivery attribute is set for the PDP type. Rather, TR 23.907 clearly teaches that the delivery order attribute is set for the traffic class.

Such a concept is derivable from TR 23.907 (pg. 20, paragraph 6.4.2.3), which discloses a table summarizing the UMTS bearer attributes. TR 23.907 (pg. 20, paragraph 6.4.2.3) states, "in Table 2, the defined UMTS bearer attributes and their relevancy for each bearer class are summarized". Again, TR 23.907 (pg. 17) states, "this information [i.e., the delivery order attribute] cannot be extracted from the traffic class". TR 23.907 (Table 2) thus ~~permits~~ the skilled person to derive that a UMTS bearer as a PDP context specifies the traffic class and the delivery order attribute for the respective traffic class. However, TR 23.907 teaches that the delivery order attribute is only associated with a respective traffic class. Put differently, TR 23.907 teaches what is described in the background section of the specification of the instant application, i.e., a delivery order attribute that defines whether the order of transmitted packages must be maintained for the UMTS.

Allowed independent claim 1 is directed to the method set forth in the flow chart of Fig. 2, which performs the steps associated with setting a delivery order attribute for a specific predetermined type of a PDP context such that the delivery order attribute becomes a new quality of service (QoS) parameter for a PDP context. Independent claim 7 is a method associated with the setting of the new QoS parameter for a PDP context, wherein claim 7 and corresponding claim 20 define the respective data communication using such a PDP context. Specifically, independent claim 7 is directed to the method set forth in the flow chart of Fig. 3, where independent claim 20 is the corresponding network element in which the method of claim 7 is implemented. Therefore, independent claims 7 and 20 are also allowable for the same reasons associated with claim 1.

In accordance with the claimed invention, PDP context QoS parameters are detected and a check is performed to determine whether a delivery order attribute is set for the transmission protocol type, e.g., the PDP context, which is used for transmission. The traffic class is determined only after such a determination is made, where different types of processing are applied to different types of traffic classes. Consequently, the claimed invention is directed to performing data packet transmissions based on at least an evaluation of a delivery order parameter that is set for a specific transmission protocol type, i.e., PDP type. Here, the claimed invention advantageously uses a "known" parameter (i.e., the delivery order attribute) in a different hierarchical layer of the communication network protocol.

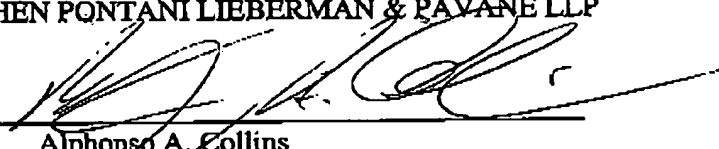
TR 23.907 fails to teach the use of the delivery order attribute in the claimed manner. TR 23.907 teaches that the delivery attribute parameter only provides an indication of whether out-of-sequence SDUs are acceptable. TR 23.907 teaches that the delivery order attribute is only associated with a respective traffic class. Moreover, as noted previously, TR 23.907 specifically states that the delivery order information cannot be extracted from the traffic class. Thus, TR 23.907 fails to teach or suggest "detecting at least a delivery order attribute (DOA) as a parameter set for a transmission protocol type used for transmission of data packets ... and ... deciding whether said delivery order attribute parameter is set for said protocol type" or the corresponding network element of amended claim 20 in which the method of claim 7 is implemented. Accordingly, independent claim 1, and amended claims 7 and 20 are all patentable over TR 23.907 and therefore, withdrawal of all the rejections under 35 U.S.C. §103 is in order, and a notice to that effect is earnestly solicited.

In view of the patentability of independent claim 1, 7 and 20, for the reasons set forth above, dependent claims 2-6, 8-19 and 21-43 are all patentable over the prior art.

Based on the foregoing amendments and remarks, this application is in condition for allowance. Early passage of this case to issue is respectfully requested.

Respectfully submitted,
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